

#### About Our Presenters

**Mr. Steve Allbee** - U.S. EPA Project Director, Gap Analysis; primary author, U.S. EPA's *The Clean Water and Drinking Water Infrastructure Gap Analysis*; 25 years EPA - development of financing programs; BA, MA, MPA.

**Mr. Roger Byrne** - Principal, Global Service Manager, GHD's Asset Management Group, Melbourne, Aus; principal author, *International Infrastructure Management Manual*; 30 years infrastructure management experience; author of over 40 manuals and guides; has executed over 100 Asset Management "Best Practice" audits; BCE, NPRE.

**Mr. Michael Gritzuk** - Director of the Phoenix Water Services Department since 1988; over 20 years experience as a water/ wastewater director in Florida, Massachusetts and New Jersey and, 6 years experience as an engineering manager with the U.S. Environmental Protection Agency; P.E. BSCE, ME (San.), MS (Envir.).

**Mr. Lynn Norton** - Western Director, Parsons Asset Management Center (PAMC); Former utilities director with over 28 years utility management experience; U.S. EPA Operations Excellence Awards recipient; BA, MPA.

**Mr. Duncan Rose** - Technical Director, Parsons Asset Management Center (PAMC); Former city/county manager; co-author of WEF's *Managing the Water/Wastewater Utility*; 30 years state & local management; Adjunct Faculty, Florida State University, Askew School of Public Policy; BA, MSP, MAPA.

**Mr. Doug Stewart** - Asset Management Program Director, Orange County Sanitation District; 25 years engineering experience, 10 years utility management; P.E., BS, MSCE.

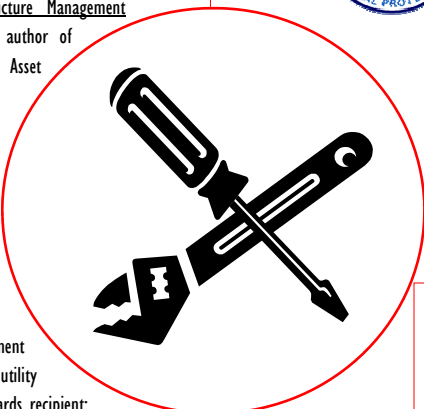
#### The "Best Practice" Self-Audit

To assist your organization to better understand its current advanced asset management status, this year's EPA workshops will include a "benchmarking" exercise. This exercise allows you to benchmark your agency's key asset management practices and activities against those deemed to be "world's best practices."

All participating agencies are asked to complete a "basic self-audit" questionnaire. Each of the exercise elements in the work-shop will assist you to complete the questionnaire. At the end of all workshops, the returns will be aggregated and each participating agency will receive a basic benchmark report showing:

- ◆ How it rates against the best practice levels
- ◆ How the average agency attending the workshops rated
- ◆ A short report identifying the most critical areas for your organization using the "Australian Value Chain" approach.

*All data will remain anonymous*



#### SPONSORED BY:



- ◆ Please register as early as possible.
- ◆ There is a \$110 per person charge for the workshop which will include lunch each day and other incidental costs.
- ◆ Workshops will begin promptly at 8:00 a.m. each day.
- ◆ Payment is to be made to AWPCA.

**Sign-up for this workshop by contacting:**

**Debbie Muse, AWPCA**  
**1042 Willow Creek Road, A101-510**  
**Prescott, AZ 86301**  
**Phone: (888) 559-8844**  
**Fax: (928) 717-9910**  
**email: musegroup@aol.com**

For additional information, hotel details and a map to workshop location, please visit:

- ◆ [www.epa.gov/owm/featinfo.htm](http://www.epa.gov/owm/featinfo.htm)
- ◆ [www.awpca.org](http://www.awpca.org)

**February 11th and 12th, 2004**  
**Phoenix Airport Hilton**  
**2435 S. 47th Street**  
**Phoenix, AZ 85034**  
**480-894-1600**

**Advancing Asset Management  
In Your Utility:**

**A "Hands-on"  
Workshop Approach**

**"In light of the many challenges  
confronting utilities, asset management  
is an essential component of an  
effective, overall management strategy."**

**Michael Gritzuk, P.E.**  
**Director,**  
**City of Phoenix**  
**Water Services Department**

#### Sponsored by:

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# Advancing Asset Management In Your Utility:

## A “Hands-on” Workshop Approach



### The Challenge:

Over the past half century, America has spent trillions of dollars building some of the finest infrastructure that history has ever seen. Indeed, this infrastructural investment has played a substantial role in the sustained wealth, prosperity, and quality of life of our country. But in many communities, this infrastructure is severely stressed from over-use, under-funding of maintenance and renewal, and aging.

***“It is clear that, only through such efforts (Advanced Asset Management), will this country be able to provide the sustained performance from its water infrastructure investment that our prosperity and quality of life have come to depend upon.”***

**G. Tracy Mehan III, Assistant Administrator for Water, U.S. EPA**

A comprehensive approach to managing our capital assets is overdue - one that brings “state of the practice” advanced asset management (AM) concepts, tools, techniques, and technologies to bear on managing for cost-effective performance. This approach, first and foremost, is one that focuses relentlessly on providing sustained performance of value to the customer at the lowest lifecycle cost.

### The Focus:

The great French author, Victor Hugo, once observed, *“An invasion of armies can be resisted, but not an idea whose time has come.”* Public sector managers have been managing assets for decades. However, it is clear that what we have been doing in the past will not be sufficient to address the growing and increasingly complex challenges that lie ahead.

Practical advanced techniques for better managing assets have been developed and refined in both the private sector in the U.S. and in water and wastewater agencies around the world. Management thinking is centered on long-term effectiveness, service sustainability, and effective environmental management. *How can these asset management (AM) concepts, tools and techniques be most effectively transferred into the water and wastewater industry? Where to start? How to proceed? How to select appropriate tools?*

### The Workshops:

The AM challenge for US agency officials is one of “knowledge transfer.” **For this reason, these workshops have been designed as an extensive “hands-on” experience.** Each workshop :

- ♦ Is built around case-studies and **participant exercises** that demonstrate the concepts, techniques and tools of advanced asset management.
- ♦ Is centered on **“case-based” mentoring** by expert asset management practitioners.
- ♦ **Incorporates a real-world “storyline”** to realistically demonstrate an advanced asset management way of approaching difficult asset-driven problems.

The agenda is built around five core questions (see agenda, right panel). **The workshops focus on demonstrating, step-by-step, how an agency would select and deploy “Best Appropriate AM Practices” that are best suited to that agency.**

### Agenda Highlights

#### Day ONE (8:00 - 5:30)

##### Introductions

- ♦ Overview of next two days
- ♦ The Basic Audit Tool

##### Background and Context

- ♦ Why the focus on AM?
- ♦ The changing utility industry
- ♦ The emerging utility of tomorrow

##### Overview of Fundamental Concepts and Core Practices

- ♦ Sustainable performance at minimum “Total Cost of Ownership”
- ♦ How assets fail
- ♦ “Full economic cost”
- ♦ Risk/consequence tradeoffs
- ♦ The AM knowledge cycle
- ♦ Continuous improvement
- ♦ Payoffs and benefits/downsides

##### Question 1: What Do I Have? Where Is It? What Is Its Condition?

- ♦ Creating an “asset hierarchy”
- ♦ Defining the “data standard”
- ♦ Cost effective condition analysis

##### Question 2: What Is My Required “Sustainable” Level Of Service?

- ♦ What is “LOS” and what drives it?
- ♦ Measuring processes in addition to outcomes
- ♦ A “Balanced Scorecard” approach

##### Question 3: Which Assets Are Critical To Sustained Performance?

Understanding how my assets can fail

- ♦ What the likelihood of failure is
- ♦ What the consequences are
- ♦ Driving capital, operations and maintenance management

##### Question 4: What Are My “Minimum Life-Cycle-Cost Strategies?”

- ♦ What are the residual lives of my assets?
- ♦ What alternative “treatment options” are feasible?

##### Question 5: What Is My Required “Annuity Funding Level?”

- ♦ How should I value my assets?
- ♦ What funding level is necessary to sustain long-term performance

#### Day TWO (8:00 - 3:30)

##### Case Study 1: Designing & Deploying an AM Program

##### Case Study 2: Developing a Lowest Life-cycle Cost CIP

##### Case Study 3: Meeting the IT Challenge - Toward an Enterprise Asset management System (EAMS)

##### Closing Summary, Questions, Comments, Evaluation, Completion of Basic Audit

